



RECEIVED

MAY 17 2006

For Ecology Use

Fee Paid 50<sup>00</sup>

Date 5/17/06 MA

State of Washington  
DEPT. OF ECOLOGY  
Application for a Water Right

Please follow the attached instructions to avoid unnecessary delays.

## Section 1. APPLICANT - PERSON, ORGANIZATION, OR WATER SYSTEM

Name Snohomish County Parks and Recreation Home Tel: ( ) -  
Mailing Address 6705 Puget Park Drive Work Tel: (425) 388 - 6600  
City Snohomish State WA Zip+4 98296 + FAX: (425) 388 - 6645

## Section 2. CONTACT - PERSON TO CALL ABOUT THE APPLICATION

☐ Same as above

Name Tom Murdoch, Adopt-A-Stream Foundation Home Tel: ( ) -  
Mailing Address 600 - 128<sup>th</sup> Street SE Work Tel: (425) 316 - 8592  
City Everett State WA Zip+4 98208 + FAX: (425) 338 - 1423  
Relationship to applicant Leases NW Stream center site in McCollum Park From  
Snohomish County Parks and Recreation

## Section 3. STATEMENT OF INTENT

The applicant requests a permit to use not more than Twenty (20) ( ☒ gallons per minute or  
☐ cubic feet per second) from a ☐ surface water source or ☐ ground water source (check only one) for the purpose(s)  
of supplying water to a trout stream exhibit. ATTACH A "LEGAL"  
DESCRIPTION OF THE PLACE OF USE. (See instructions.) NOTE: A tax parcel number or a plat number is not  
sufficient.

Estimate a maximum annual quantity to be used in acre-feet per year: \_\_\_\_\_

☐ Check if the water use is proposed for a short-term project. Indicate the period of time that the water will be needed:

From \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

## Section 4. WATER SOURCE

If SURFACE WATER						If GROUNDWATER		
Name the water source and indicate if stream, spring, lake, etc. If unnamed, write "unnamed spring," "unnamed stream," etc.:						A permit is desired for <u>1</u> well(s).		
Number of diversions: _____								
Source flows into (name of body of water):						Size & depth of well(s): <u>6 inch casing; 200 feet deep</u>		
LOCATION								
Enter the north-south and east-west distances in feet from the point of diversion or withdrawal to the nearest section corner: <u>1200' South of the NW section corner of NW 31 28 05</u>								
¼ of	¼ of	Section	Township	Range(E/W)	County	If location of source is platted, complete below:		
						Lot	Block	Subdivision
<u>SW</u>	<u>NW</u>	<u>31</u>	<u>28N</u>	<u>05E</u>	<u>Snohomish</u>			
For Ecology Use Date Received: <u>5/17/06</u> Priority Date: <u>5/17/06</u>								
SEPA: Exempt/Not Exempt <u>Exempt</u> FERC License # _____ Dept. Of Health # _____								
Date Accepted As Complete <u>5/17/06</u> By <u>OK</u> Date Returned _____ By _____ WRIA: <u>7</u>								

Appl. No.: 61-28437Also See  
Application



## Section 5. GENERAL WATER SYSTEM INFORMATION

- A. Name of system, if named: NW Stream Center Trout Stream Exhibit Well
- B. Briefly describe your proposed water system. (See instructions.) Ground water will be pumped to the NW Stream Center Trout Stream Exhibit where it will be released into an artificial stream system. There it will flow to a man made pond and be recirculated through the exhibit. Water from the exhibit pond will infiltrate and recharge the ground water system. There will be no consumptive use of the ground water. A six horsepower pump will be used to withdraw water from a 200 foot deep well with a six inch casing. Native vegetation will be planted around the exhibit to provide shade and reduce evaporation.
- C. Do you already have any water rights or claims associated with this property or system? ☐ YES ☒ NO  
PROVIDE DOCUMENTATION.

## Section 6. DOMESTIC / PUBLIC WATER SUPPLY SYSTEM INFORMATION (Completed for all domestic/public supply uses.)

- A. Number of "connections" requested: \_\_\_\_\_ Type of connection \_\_\_\_\_ (Homes, Apartment, Recreational, etc.)
- B. Are you within the area of an approved water system? ☐ YES ☐ NO  
If yes, explain why you are unable to connect to the system. Note: Regional water systems are identified by your County Health Department.

Complete C. and D. only if the proposed water system will have fifteen or more connections.

- C. Do you have a current water system plan approved by the Washington State Department of Health? ☐ YES ☐ NO  
If yes, when was it approved? \_\_\_\_\_ Please attach the current approved version of your plan.
- D. Do you have an approved conservation plan? ☐ YES ☐ NO  
If yes, when was it approved? \_\_\_\_\_ Please attach the current approved version of your plan.

## Section 7. IRRIGATION/AGRICULTURAL/FARM INFORMATION (Complete for all irrigation and agriculture uses.)

- A. Total number of acres to be irrigated: \_\_\_\_\_
- B. List total number of acres for other specified agricultural uses:
- |           |             |
|-----------|-------------|
| Use _____ | Acres _____ |
| Use _____ | Acres _____ |
| Use _____ | Acres _____ |
- C. Total number of acres to be covered by this application: \_\_\_\_\_
- D. Family Farm Act (Initiative Measure Number 59, November 3, 1977)  
Add up the acreage in which you have a controlling interest, including only:  
‡ Acreage irrigated under water rights acquired after December 8, 1977;  
‡ Acreage proposed to be irrigated under this application;  
‡ Acreage proposed to be irrigated under other pending application(s).
1. Is the combined acreage greater than 6000 acres? ☐ YES ☐ NO
2. Do you have a controlling interest in a Family Farm Development Permit? ☐ YES ☐ NO  
If yes, enter permit no: \_\_\_\_\_
- E. Farm uses:  
Stockwater - Total # of animals \_\_\_\_\_ Animal type \_\_\_\_\_ (If dairy cattle, see below)  
Dairy - # Milking \_\_\_\_\_ # Non-milking \_\_\_\_\_



## Section 8. WATER STORAGE

Will you be using a dam, dike, or other structure to retain or store water? The lower end of the ☒ YES ☐ NO  
exhibit is a 6-foot deep pond excavated from a parking lot.

NOTE: If you will be storing 10 acre-feet or more of water and/or if the water depth will be 10 feet or more at the deepest point, and some portion of the storage will be above grade, you must also apply for a reservoir permit. You can get a reservoir permit application from the Department of Ecology.

## Section 9. DRIVING DIRECTIONS

Provide detailed driving instructions to the project site.

the site is located in McCollum Park, 600-128<sup>th</sup> Street SE, Everett, WA 98208. It is located approximately 1/2 mile east of Interstate-5 from Exit #186 (128<sup>th</sup> Street exit), south of the city of Everett and north of the city of Mill Creek.

## Section 10. REQUIRED MAP

- A. Attach a map of the project. (See instructions.)

## Section 11. PROPERTY OWNERSHIP

- A. Does the applicant own the land on which the water will be used? ☒ YES ☐ NO  
If no, explain the applicant's interest in the place of use and provide the name(s) and address(es) of the owner(s):

If no, explain the applicant's interest in the place of use and provide the name(s) and address(es) of the owner(s):

[illegible]

- B. Does the applicant own the land on which the water source is located? ☒ YES ☐ NO  
If no, submit a copy of agreement:

If no, submit a copy of agreement:

**I certify that the information above is true and accurate to the best of my knowledge. I understand that in order to process my application, I grant staff from the Department of Ecology access to the site for inspection and monitoring purposes. Even though I may have been assisted in the preparation of the above application by the employees of the Department of Ecology, all responsibility for the accuracy of the information rests with me.**

**MARK SOINE**  
Deputy Executive

Applicant (or authorized representative)

3-22-06 D-10

SAME  
Landowner for place of use (if same as applicant, write "same")

Date \_\_\_\_\_



Use this page to continue your answers to any questions on the application. Please indicate section number before answer.

Section 3. Statement of Intent: Well water will augment surface water in a manmade pond that will be pumped to and recirculated through an artificial stream that will flow back into the pond. The stream will simulate a typical lowland Western Washington stream. It will have a self-sustaining population of cutthroat trout. Water from the well will infiltrate through the bottom of the exhibit's pond recharging the groundwater system. There will be no consumptive use of the well water.

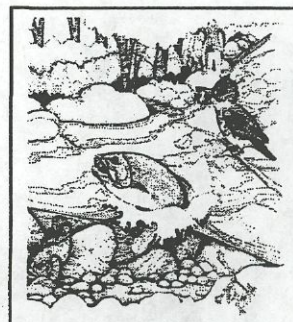
We are returning your application for the following reason(s):	
<u>Examination fee was not enclosed</u>	APPLICANT PLEASE RETURN TO CASHIER, PO BOX 5128, LACEY, WA 98509-5128
<u>Section number(s) _____ is/are incomplete</u>	APPLICANT PLEASE RETURN TO THE APPROPRIATE REGIONAL OFFICE
Explanation:	
Please provide the additional information requested above and return your application by _____ (date).	

Ecology staff \_\_\_\_\_ Date \_\_\_\_\_



# The Adopt-A-Stream Foundation

Northwest Stream Center  
600 - 128th Street SE  
Everett, WA 98208-6353  
tel: 425-316-8592, 771-6671  
fax: 425-338-1423  
email: [aasf@streamkeeper.org](mailto:aasf@streamkeeper.org)  
web: [www.streamkeeper.org](http://www.streamkeeper.org)



May 4, 2006

Mr. Dan Swenson, Section Manger  
Water Resource Program  
Washington Department of Ecology  
NW Regional Office  
3190 160<sup>th</sup> SE  
Bellevue, WA 98008-5452

RECEIVED  
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Regarding: Request for Expedited Water Right Application Review

Dear Mr. Swenson,

During the last few years, the Adopt-A-Stream Foundation has been developing a regional environmental learning facility called the Northwest Stream Center (NWSC). It is located on a 20-acre site in *Mc Collum Park* leased from Snohomish County's Parks and Recreation Department. Located 1/2 mile east of Interstate-5 between Seattle and Everett, it is an excellent site for teaching the public about stream and wetland ecology.

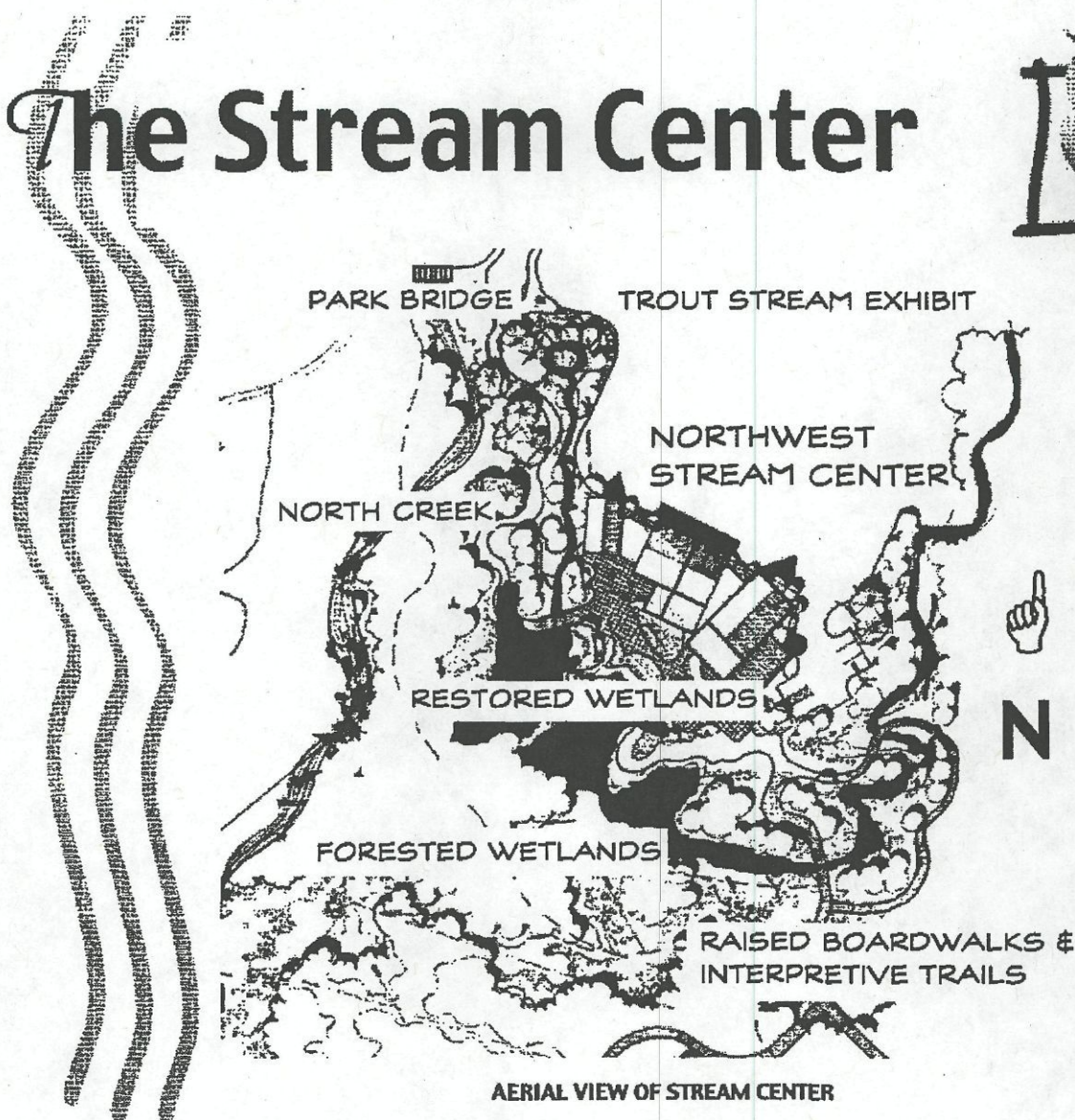
When we initiated our lease in 1993, the site included a four-acre parking lot that was a wetland area prior to the late 1960's. Sixteen acres of forested wetlands and an upland cedar grove were also on site. North Creek, a tributary to the Sammamish River flows on our western boundary.

In 1994, a *NWSC Master Plan* was completed. It called for:

- Restoration of three acres of wetlands from the existing parking lot to be used for wetland ecology training purposes, water pollution filtration and wildlife habitat;
- Construction of a Visitors Building complete with a natural resource research library and conference/classroom space;
- Construction of approximately one-mile of raised boardwalk interpretive trails leading visitors through forests and wetlands to a salmon habitat viewing platform and a forest canopy viewing tower; and
- Construction of an outdoor Trout Stream Exhibit along the NWSC entry trail.



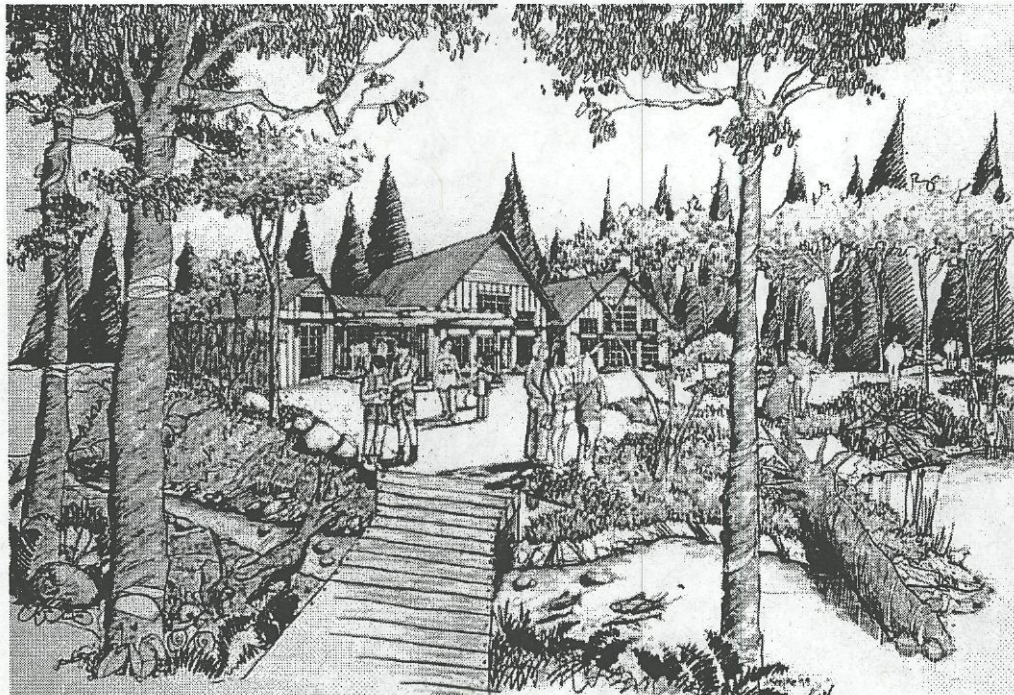
# The Stream Center



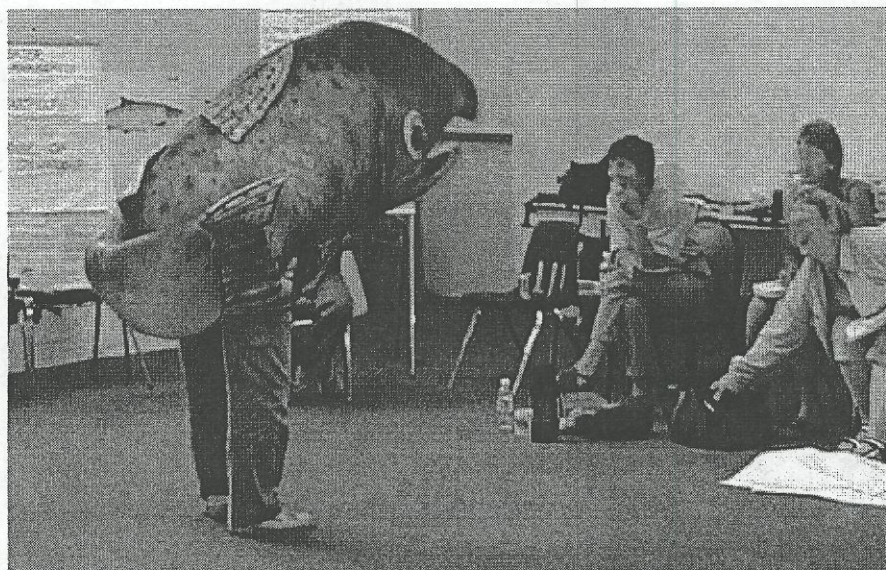
In 1995, we began a two-year wetland restoration effort. Today, the restored wetlands look as if they were created by *Mother Nature*, and they have become new habitat for a large variety of wildlife. This rehabilitated ecosystem includes a wet meadow centerpiece with a shrub/scrub edge surrounded by two freshwater marsh ponds. One of those ponds filters stormwater from adjacent Mc Collum Park ball fields and roadways. The other was constructed to become the "receiving body of water" for our future Trout Stream Exhibit.

After major fund raising efforts through 1998, construction of the Visitors Building began on the remaining one-acre gravel parking lot area. That building is now complete and used primarily for *Streamkeeper Academy*, the umbrella name for our environmental education programs.





**NWSC Visitors Building and Trout Stream Exhibit Pond**



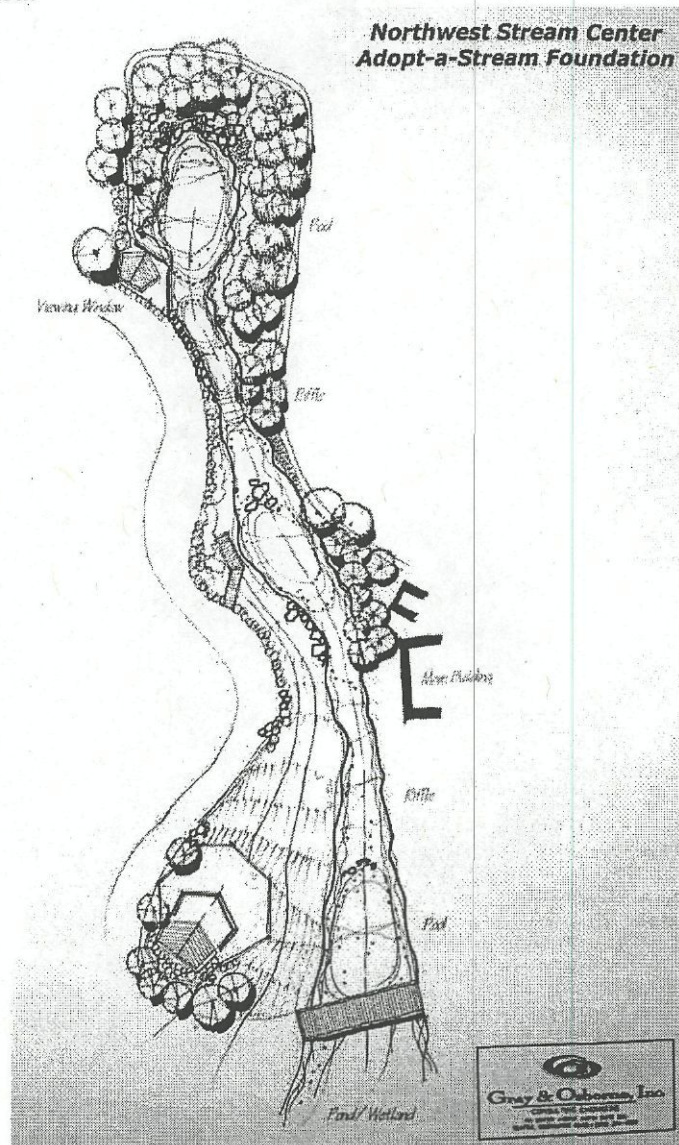
***"Sammy the Salmon"* provides teachers stream ecology training**

During the last three years, we focused much of our energy on the Trout Stream Exhibit. I am pleased to advise that we established a partnership with 28 companies who have joined together to build the exhibit. The design, materials, equipment and actual construction are being donated by: Gray & Osborne Engineering, Wilder Construction, Rinker Materials, Concrete Technology Incorporated, Harris Rebar, Rebar International,



Service Electric, University Mechanical, Cadman Rock, Matheus Lumber, Apex Steel, NW Erosion Control, Pacific Concrete Pumping, Ralf's Concrete Pumping, Reliable Concrete Pumping, CAD of Puget Sound, Neslon Trucking, HD Fowler, National Waterworks, Hanson Pipe Products and Harmsen and Associates. In addition, the Tulalip Tribes have provided a \$150,000 grant to pay for exhibit elements that we cannot get donated.

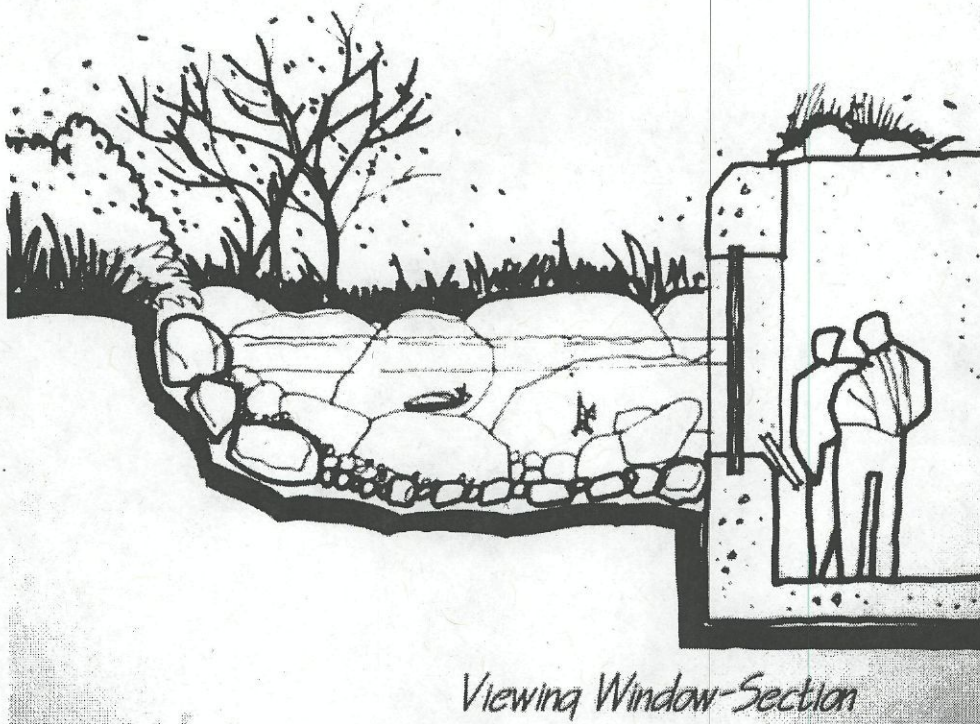
The headwaters of the trout stream are going to be contained in a concrete retaining area complete with two viewing windows. That headwater area will be constructed on top of the last remaining piece of the gravel parking lot that was on site in 1994. The graphic below shows a new riparian zone that will be planted to complete the transformation of that parking lot area.



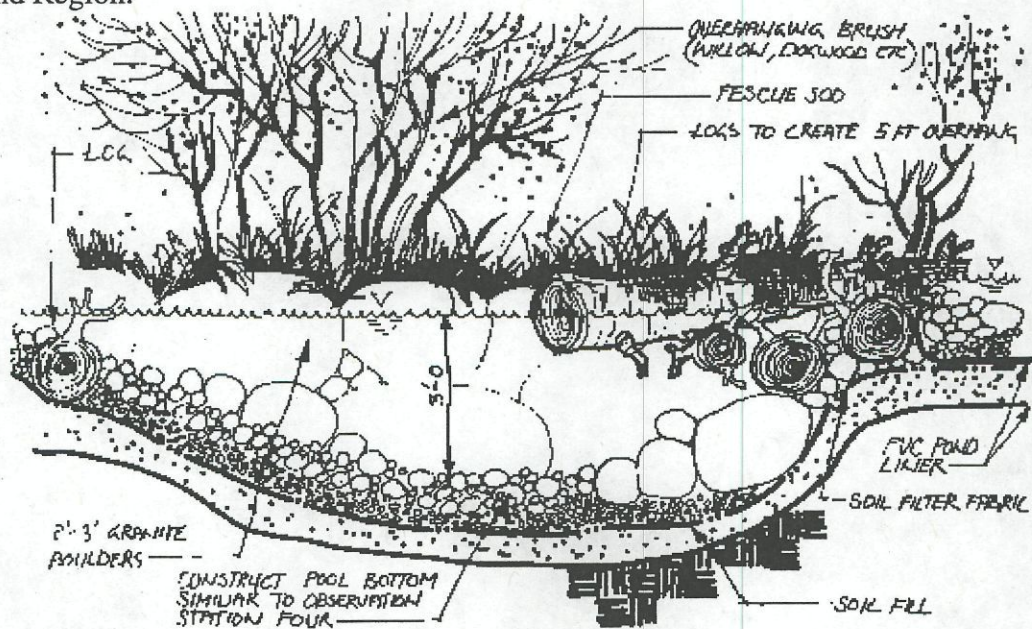
**NW Stream Center Trout Stream Exhibit Headwaters**



Two viewing windows have been designed for the exhibit.



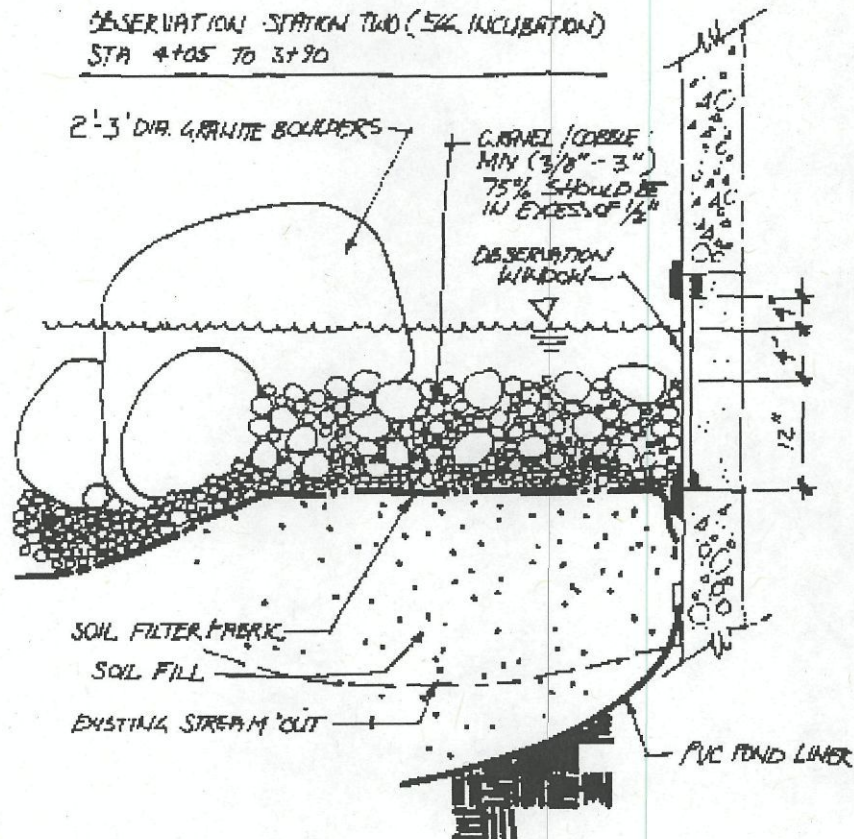
One will enable you to see into a pool habitat typical of small streams found in the Puget Sound Region.



OBSERVATION STATION FIVE (UPSTREAM POOL FROM SPAWN BED)  
STA. 0+80 TO 0+60



The other viewing window will enable visitors to see into a gravel riffle. There, they will learn about caddisfly, mayfly, stonefly and other benthic macroinvertebrates. During the winter months, visitors will be able to see resident cutthroat trout spawning in the riffle gravel and, later, watch their eggs mature to fry.



Our objective is to create an artificial stream that functions like a natural stream system complete with a self-sustaining fish population. In order to achieve that goal, we need cool, highly oxygenated water. One source of water is the six-foot deep pond excavated from the parking lot to serve as the exhibit's "receiving body of water." Water from that pond will be re-circulated to the exhibit's headwaters (there will be no consumptive use of this surface water).

Unfortunately, during dry periods, the depths of that pond shrink with corresponding drop in the surrounding water table. The reduced volume of water is then subject to increased exposure to sunlight. That results in higher water temperature and decreased oxygen levels, an unsuitable environment for the fish that will be in the exhibit.

To combat that problem, Gray and Osbourne Engineering recommends that we supplement our surface water source with well water. As you know, we are located near the Emander Landfill and next to North Creek. We are proposing to sink a well at a



location recommended by Tamara Dean and Jerry Liszak after they conducted a site visit in 2004 (see attached Letter and map).

When pond levels dictate, water will be piped from the well to the exhibit and released into the new stream. That water will, in turn, seep back into the ground water system or overflow into wetlands adjacent to North Creek. There will be no consumptive use of the well water.

After the NWSC becomes fully operational, we project up to 45,000 visitors a year. They will leave with an understanding of stream and wetland ecology & fish and wildlife habitat restoration. Lessons learned here will be put to use in watersheds throughout the Pacific Northwest. The Trout Stream Exhibit, which is dependent on re-circulated surface waters from a pond and well water to function properly, will be one of the major training tools that we will use to teach those lessons.

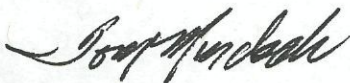
We are planning to begin construction of the exhibit headwaters within six weeks. Installation of the re-circulating pumps in the pond portion of the exhibit will likely occur during August as the downstream pond levels begin recede. At that time, we would also like to connect water from our proposed well to the new stream and test all systems.

I am aware that in order for the well water and surface water connections to occur, a Water Right must be established. Attached is a *Water Right Application for Surface Water*, and a second for *Ground Water*. They were completed in partnership with Snohomish County Parks and Recreation, the owners of the property where the NWSC and the proposed Trout Stream Exhibit are located. Our proposed use of surface and ground waters are non-consumptive and will substantially enhance and protect the quality of the natural environment.

In order to realize the tremendous public benefits from the Trout Stream Exhibit, I am requesting that you expedite the review process of these applications so that it will be possible for us to meet our construction schedule.

Please contact me if you would like any further information. Thank you for your consideration.

Sincerely Yours,



Thomas B. Murdoch  
Executive Director





STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

Northwest Regional Office 3190 160th SE Bellevue, Washington 98008-5452 (425) 649-7000

August 31, 2004

Tom Murdoch  
Adopt-A-Stream Foundation  
600 128<sup>th</sup> Street SE  
Everett, WA 98208-6353

Dear Mr. Murdoch:

RE: Site Maps for Proposed Well Location

Thank you again for allowing Jerry Liszak and myself to tour the Adopt-A-Stream existing and proposed facilities. Enclosed, please find three maps depicting property boundaries, buffers, and local stratigraphy.

As you know, the proposed well must be drilled at least 1000 feet from the Emander Landfill. In addition, our office recommends that the well be located at least 500 feet from the main stem of North Creek in order to avoid continuity issues between the ground water withdrawal and surface water flow in the stream. The site map shows one possible placement of the well; however, the foundation could feasibly drill the well anywhere along the southwest property line of McCollum Park and still meet the 1000-foot landfill setback and 500-foot stream buffer.

A series of geologic cross-sections in McCollum Park were mapped as part of the Emander Landfill closure. The cross-section located nearest to your proposed well site is D to D'. As you can see, water-bearing material is present from approximately 10 feet to 100 feet below ground surface at this location. A hard, clay layer appears to be present below this depth. Although you will be drilling southwest of this cross-section, the stratigraphy will be similar. Be sure to have the well driller penetrate the aquifer completely (screen the well at the bottom of the aquifer zone, as illustrated by MW 12, 18, 19, and 21 in the cross-section).

Please contact me with any questions that you may have. When Dan Swenson, Program Supervisor, returns next week, I will discuss your situation with him to verify that a water right approval is in fact a possibility.

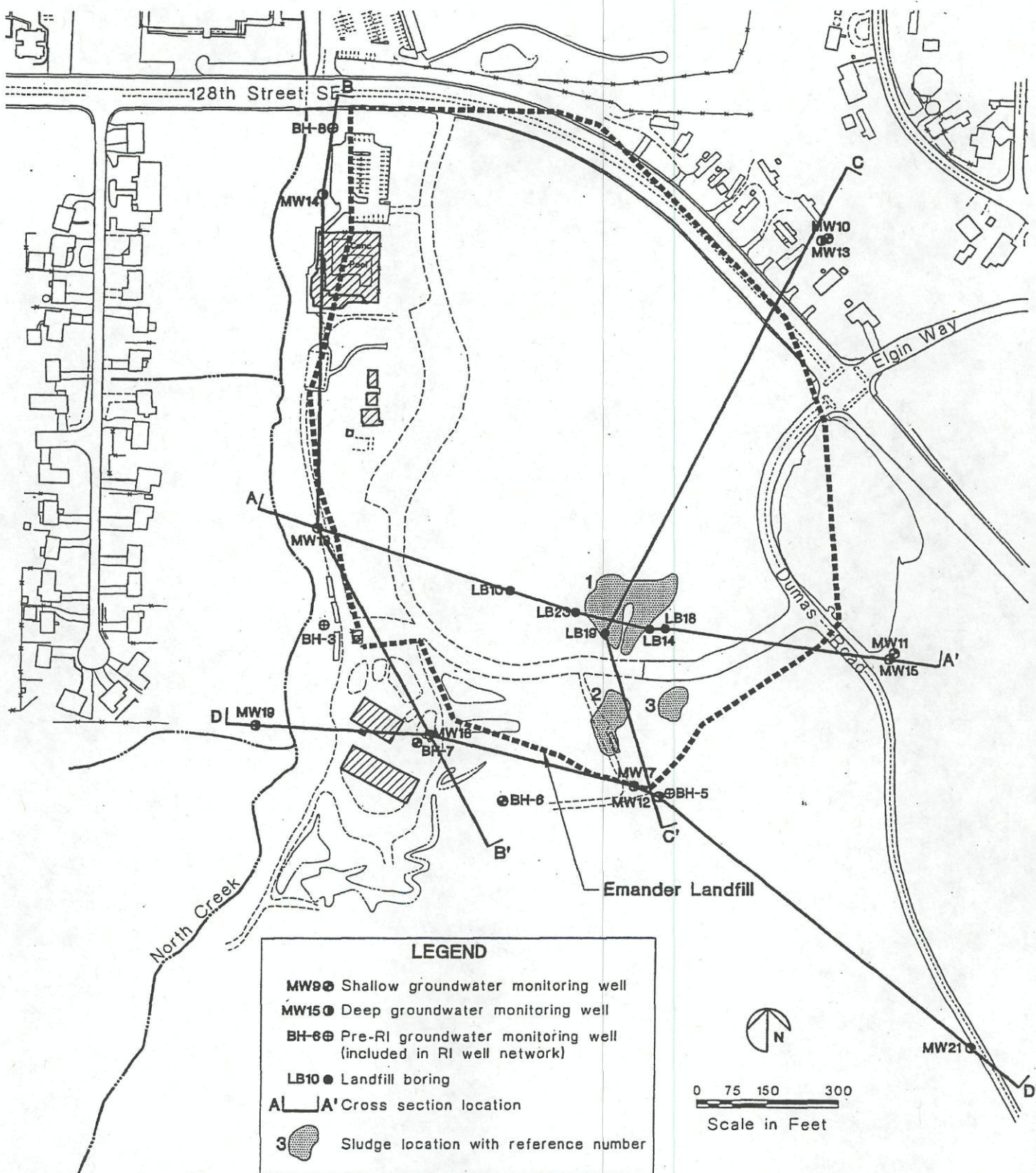
Be in touch,

A handwritten signature in cursive script that reads "Tamara Deen".

Tamara Deen

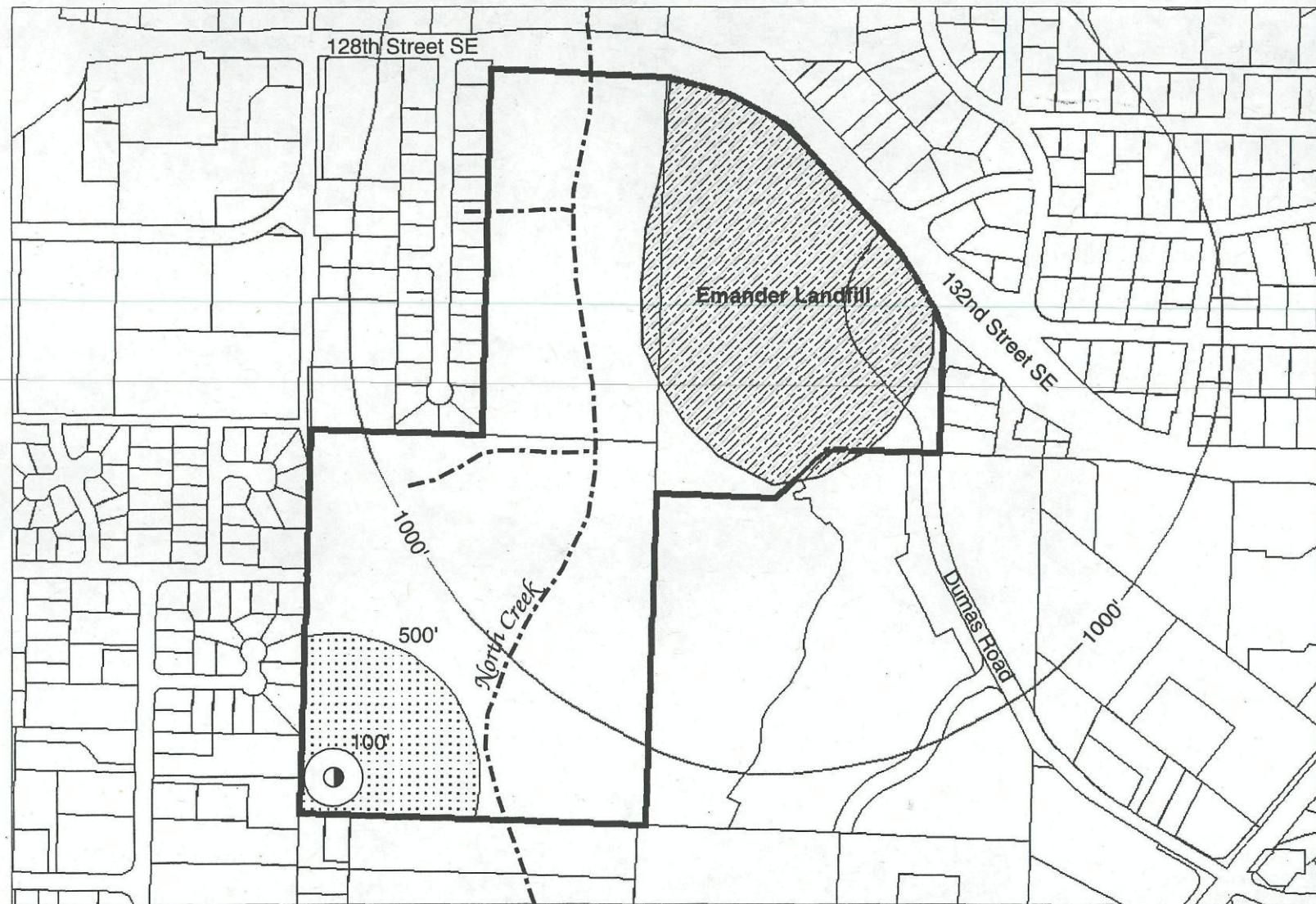
Program: Water Resources  
Phone: 425-649-4451  
Email: tewo461@ecy.wa.gov













# Site Map of Proposed Well Location



## Legend

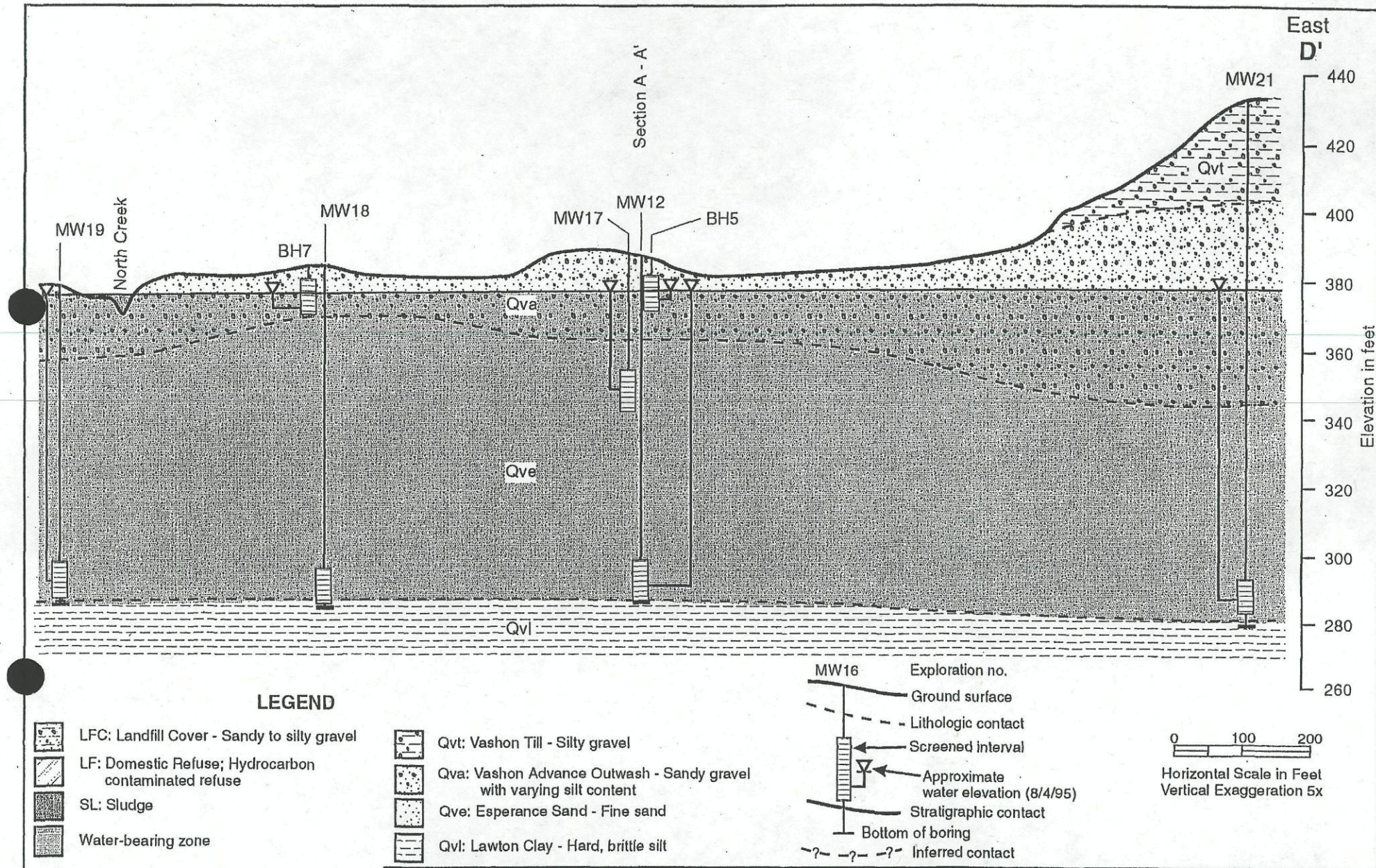
- |   |                     |   |                          |
|---|---------------------|---|--------------------------|
|  | Proposed Well       |  | 1000 ft. Landfill Buffer |
|  | 100 ft. Well Buffer |  | Emander Landfill         |
|  | 500 ft. Well Buffer |  | McCollum Park Boundary   |

0 0.05 0.1 0.2 0.3 0.4 Miles



WASHINGTON STATE  
DEPARTMENT OF  
E C O L O G Y





**AGI**  
TECHNOLOGIES

**Hydrogeologic Cross Section D - D'**  
Snohomish Co. Public Works Dept./McCollum Park & Emarder Landfill RI  
Snohomish County, Washington

FIGURE

**16**

276xsd.cdr

PROJECT NO.  
15,512.276

DRAWN  
ALW

DATE  
17 April 95

APPROVED  
AIX

REVISED

DATE